Chipped Stone Materials

A total of 2410 pieces of chipped stone were recovered at the site. 159 of these were worked or utilized (hereafter referred to only as worked) and 2251 were debutage. Most of the material is flint, but there are a small number of quartz and quartzite specimens. Lacking detailed familiarity with flint sources in the region, we were led to sorting the flint according to color. We devised a list of 8 categories (dark grey and black, mottled, green grey, grey, white-blue grey, red grey/red brown, brown mix with dark grey and black, and brown) which seemed to give us the greatest separation with a minimum amount of overlapping between categories. The cultural reliance of this procedure may be questioned, but it enabled us to get a handle on the data in order to perform certain manipulations. It is inconsequential that we may have been delimiting differences in the flint that were not there prehistorically. Color, like any other attribute, is a tool which enables the archeologist to come to grips in some way with the data. It is a self-imposed form and can be utilized in a perfectly valid way for description (prehistoric ethnography), regardless of its relevancy for prehistoric peoples.

CHIPPED STONE

Procedure

The collection of stone tools from the Friendsville site (18GA23) includes 153 chipped artifacts and fragments. This sample was first divided into eleven different look-alike groups on the basis of a few general descriptive attributes. Next each artifact was described in greater detail on the basis of attributes selected from Binford's (1963: 193 - 221) "Proposed Attribute List for the Description and Classification of Projectile Points" as well as Kent's (1970: 118 - 120) modifications of Binford's list. This helped to describe the specimens with greater clarity in some respects, although not all the attributes adequately described the specimens. For example, none of the seven different Haft elements (Binford 1963: 211 - 212; Fig. 12) were applicable to the Side Notched Eared points in Group III. Consequently, although Binford's (1963) and Kent's (1970) terms have been used to describe the following groups, they have not been used to the exclusion of other generally accepted terms such as those used in Ritchie's (1961) "A Typology and Nomenclature for New York Projectile Points." Since this sample is small, Binford's numerical notations for use on punch cards have not been used. The length, width, and thickness of each whole projectile point was measured with a vernier caliper. This data is presented in Tables 2 - 10. Where possible, dimensions of broken artifacts were estimated and these are enclosed by parentheses.

The resulting data was then used to redefine and to arrive at the descriptions of the groups of projectile points presented below. A few of these groups may approach projectile point types which have been well defined elsewhere in the East. In some cases there are individual specimens which are good examples of generally accepted types. Non-random distribution of points comprising individual groups would tend to validate these groupings. Table 1 shows the horizontal distribution of projectile points across the site. The possible significance of these distributions will be discussed below in respect to each of the groups of chipped stone tools which will be described and compared to established types in the following order:

I. Stemmed Points: ~~Subgroup A~~ (989, a-p)

There is a sample of 23 of these points. The edges of the blades of several are flaked at a steep angle and individual flake scars end in hinge fractures. This, as well as asymmetrical amd incurvate blades, may indicate extensive re-sharpening. One (989,a) with an excurvate-incurvate blade has considerable wear on all sides of the dulled tip which may indicate that it was used as a drill. It is included in ~~Subgroup A~~ Group I on the basis of form rather than function. This resharpening makes it difficult to determine the original form of the blade. Six with triangular, and six more with ovate blades, may approximate the original form. Fifteen have biconvex cross-sections. The others are either widely variable or indeterminable in this respect. Nine have straight, nine have convex, and four have concave bases. Only one has basal grinding. Nineteen have a lateral-basal haft. Only two have lateral grinding on the tang. Twenty have obtuse shoulders. Six have parallel sided tangs, while seventeen have contracting-straight tangs. There seems to be a considerable degree of conformity in respect to form within this particular group.

How do these interrelate

One of these points (989,m), made of a rather exotic flint, seems to have a disproportionately long and wide stem in respect to its short and squat blade. It gives the impression that it may have been considerably larger before breakage and resharpening. If so it may have been about the size and shape of one of the kinds of points within the Adea Culture (Dragoo 1963: Pls. 39, 40).

These points seem to be distributed across the entire site from one end to the other (Table I). However there are a few more in the south than in the north. Ten were in the ~~plow~~ Ap soil zone. Others were in, or near the top of the ~~sub~~soil B21 zone. One of the two with lateral grinding described above was in Fea. 11 (989, g).

They would seem to look the most like parallel stemmed points from both the Dixon and Rohr Rock shelters (Dragoo 1959: 159 - 160, 180; Figs. 4, no. 1 - 10, Fig. 9, Fig. 10, Fig. 12). These stemmed points do not look like the "holotype" as defined by Ritchie (1961: 51 - 52) for the Steubenville Stemmed Point, because of the parallel sided stem and convex base. However in the range of variations

as defined by Ritchie (1961: Pl 30, 7) there is one specimen with a tapered stem. Several Steubenville Stemmed Points are illustrated by Mayer-Oakes (1955). Two of them (Pl. 27D) look very much like the Friendsville sample. The same can be said for some others.(Pls. 77, 87). This gradation may be of ~~behavioral~~ historical and cultural significance but definition in terms of space and time is not apparent.

These points are thought to belong to the late Archaic, but may also have typological affinities with the Panhandel Archaic and the Early Woodland Adena cultures (Draggoo, 1959: 213-214). Possibly the steatite sherd (see page ____), and the hematite celt (see page ____) which come from the southern end of the site where many of these points are found should be associated with these stemmed points.

TABLE 2: METRIC ATTRIBUTES

I. Stemmed Points: Subgroup A

Catalog No.	Length	Width	Thickness	Remarks
46B	~~28 mm~~ —	~~22 mm~~ —	~~5.8 mm~~ —	All of blade and most of both shoulders broken off
50	(25.)	19.0	7.0	Tip broken off
52	43.6	26.0	8.0	
54	(45.)	22.5	7.7	Tip broken off
58	38.7	27.5	8.6	
61	33.5	21.4	9.3	
62	(50.)	26.0	9.7	Tip broken off
143A	—	—	—	All of blade and both shoulders broken off
143B	—	—	—	Most of blade and both shoulders broken off
145	(45.)	19.7	7.6	Tip broken off
154	41.8	25.0	8.4	
157	37.5	25.7	8.0	
166	—	—	7.5	All of blade and one shoulder broken off
182A	(35.)	22.5	8.4	Tip broken off
183	30.0	21.0	7.0	
191	(35.)	21.7	8.8	Tip broken off
195	—	—	—	All of blade, one shoulder and most of other shoulder are broken
199	47.0	25.5	10.0	Small corner of base is broken off
219	(30.)	17.6	7.4	Tip, one shoulder, part of base broken
323	32.4	25.4	8.8	
334	—	—	—	All of blade and one shoulder broken off
226	34.5	21.0	7.7	
239	(45.)	25.0	9.7	Tip broken off.

II. Contracting Stemmed Points (989, q-t)

This group is defined on the basis of 4 broken specimens which consist of lozenge-shaped tangs. Although missing, the blades probably had biconvex transverse cross-sections as indicated by the transverse break through the point. The haft is lateral-axial. The shoulder is either absent or at a very obtuse angle. The tang is contracting-concave. On one fire spalled specimen (989,t) the broken edges have been slightly retouched and show wear from use as either a knife or scraper.

These were found entirely in the Ap soil zone in the south end of the site (Table 1). Since this evidence is so fragmentary no positive typological identification is possible. Nevertheless they seem to be vaguely similar to several types which have a wide distribution in both space and time such as the Rossville Point (Ritchie 1961: 46, p. 126), lozenge-shaped points from Duncan Island (Whitthoft 1959: fig. 1 m-p), the Poplar Island Point (Kinsey in Ritchie 1961: 44,45; pls. 24,25), and the Morrow Mountain II Point (Coe 1964: 37-43, fig. 34). Lozenge-shaped points have also been illustrated for Garrett County (Corliss 1954: 6-12; fig. 3, 9-11; fig. 4, 8-11).

These four points from Friendsville are tentatively assigned to the latter part of the Archaic, because the majority of the other artifacts from the south end of the site are assignable to this period.

TABLE 3

METRIC ATTRIBUTES OF II. Stemmed Points - Subgroup B

Catalog No.	Length	Width	Thickness	Remarks
46C	(35 mm)	(25 mm)	6 mm	All of blade and one shoulder broken off
177	--	--	--	All of blade and both shoulders broken off
1828	--	(35 mm)	(10 mm)	All of blade and one shoulder broken off
318	--	(30 mm)	(10 mm)	All of blade, part of one shoulder spalled off

III. Side Notched-Eared Points (990, a-j)

There are 16 points within this sample. Their blades range from being triangular to slightly ovate. The cross-sections of nine examples are biconvex while five are asymmetrically biconvex.

One specimen (990, i), larger than the others, has a plano-convex transverse cross-section. Most of the plano face of this specimen shows the unmodified surface of the flake from which the point was made with retouching only around the edges. The convex face has been entirely covered with secondary flake scars as are all other similar points. The longitudinal cross-section of this point is concavo-convex which further indicates that the point was made from a large curved flake.

Fourteen have concave bases while two are straight. Thirteen are characterized by basal grinding which is usually most extensive on the prominent "ears". ~~The haft, or side-notches, is lateral - coincidental on all examples.~~ On fourteen the side-notches are ground which is a continuation of that on the base and ears. On all examples the shoulder is obtuse and the tang expanding-concave.

How do these correlate

Although examples of this group were found scattered from one end of the site to the other, the majority of them came from the north end (Table 1). Also at the northern end of the site one of these points (990c) was in the B21 soil zone just above the south side of Fea. 8. Although not in indisputable association, it was at least the closest culturally diagnostic artifact to Fea. 8.

The soil zones in which the rest of these points were found is as follows: 5 were in the Ap zone, 1 was in the Late Prehistoric Fea. 22 and another in the historic Fea. 15. These 7 points have been disturbed from their original stratigraphic context. 7 other points were in the B_{21} zone. 1 point was in the B_{22} and horizontally about 12 m from Fea 8.

This group of points conforms closely to Ritchie's (1961: 18, Pl. 6) Brewerton Eared Triangle Points and may also be similar to the related Brewerton Eared-Notched Points (Ritchie 1961: 17, Pl. 5). The size of the points from Friendsville tend to be small in respect to the range of variation in size for the New York specimens. These two types are in the minority in the New York Brewerton complex while at Friendsville, as far as the limited sample permits, these points seem to be in the majority.

TABLE 4

METRIC ATTRIBUTES OF III. Side Notched Eared Points

Catalog No.	Length	Width	Thickness	Remarks
18	(30 mm)	20.7 mm	6.7 mm	Tip broken off
66	(20 mm)	13.5 mm	6.1 mm	Tip broken off
69	22 mm	13.7 mm	5.9 mm	
90	--	--	--	Tip and one side notch broken off
111	(30 mm)	18 mm	6.9 mm	Tip broken off
112	(35 mm)	(15 mm)	(8 mm)	Tip spalled off, side spalled off
135	(23 mm)	18 mm	4.6 mm	Tip broken off
155	(32 mm)	16.9 mm	5.6 mm	One ear broken off
171	(24 mm)	17.9 mm	5.0 mm	One ear broken off
182	--	--	--	Blade broken off through notches
243	(30 mm)	19.3 mm	(5 mm)	Tip spalled off
256	23.3 mm	16.5 mm	6.5 mm	
321	(20 mm)	14.9 mm	4.7 mm	Tip broken off
344	(35 mm)	22 mm	6.5 mm	Tip broken off
367	(25 mm)	(20 mm)	(6.0 mm)	Tip and one ear spalled off

IV. Side Notched Points: Subgroup A (990, K-5)

There are ten specimens in this sample. They have triangular or occasionally ovate blades. The edges of one example (990g) may be slightly serrated. The transverse cross-sections are biconvex. The base ranges being primarily convex to straight. Four specimens have slight basal grinding. The haft on most is lateral-coincidental while a few are lateral-base. Two specimens are ground in the side notches. The shoulder ranges from usually being an obtuse to occasionally a right angle. The tang is always expanding-concave.

A few of these points were found in the middle of the site while most came from the north end [redacted] (Table 1).

7 of these points were in the Ap soil zone. 1 was from the Late Prehistoric Fea. 22. These eight speciments are probably not in their original stratigraphic context. 2 points were in the B_{21} soil zone.

This group seems to be similar to Ritchie's (1961: 19, Pl. 7) Brewerton Side-Notched Points. In respect to size the Friendsville examples, although within the range of variation, are small. The main distinctions between Groups III and IV are as follows. The base in Group III ranges from concave to straight while in Group IV it ranges from straight to convex. Group III is characterized by prominent "ears". However a few specimens on which the "ears" are not particularly prominent grade toward Group IV. The fact that these two groups have a similar geographic distribution in the Friendsville site perhaps help to demonstrate that they are historically related Brewerton types of the wide-spread Laurentian Tradition.

TABLE 5

METRIC ATTRIBUTES OF IV. Side Notched Points

Catalog No.	Length	Width	Thickness	Remarks
46A	25.0 mm	18.0 mm	6.8 mm	
75	25.5 mm	(21 mm)	5.7 mm	One shoulder broken off
114	26.8 mm	17.4 mm	8.3 mm	
124	27.0 mm	17.6 mm	7.0 mm	
138	32.9 mm	(17 mm)	5.9 mm	
139	34.0 mm	21.7 mm	6.8 mm	
156	--	--	--	All of blade broken off
220	35.4 mm	26.5 mm	17.4 mm	
253	(35.0 mm)	(25.0 mm)	6.0 mm	Tip broken off, one shoulder broken off
382	(30.0 mm)	20.8 mm	8.0 mm	Tip broken off

Quite likely in the northern end of the Friendsville site, as indicated by the similar distribution of the projectile points in Groups III and IV there was a component of the Brewerton Phase of the Lawrentian Tradition (Ritchie, 1965: 79-102). If so, then this would be the oldest occupation at the site dating approximately 2000 B. C.

Tentatively included in this occupation is the deposit of river cobbles designated as Fea. 8. It is resting on top of the B_{22} soil zone. Since this is the deepest and therefore the oldest excavated soil zone, it could have been the exposed surface of the ground at the time of the Brewerton occupation. Typologically, the Brewerton points were the earliest artifacts found at the Friendsville site.

As mentioned above one Brewerton Eared Notched point was very close to this feature. Near this projective point and also in the B_{21} soil zone was the largest of the two fragments of ground stone which could be either a grooved axe or adz. ← Fig. 22.

Another small fragment of a ground axe or adz was also found in the Ap soil zone. While stone celts, gauges, and adzes without grooves are typical Lawrentian traits, ground axes were not part of the Lawrentian assemblage of tools in New York (Ritchie, 1965: 100-101). However, Dragoo (1959: 214) considers full-grooved axes to be a Lawrentian-like trait in the Upper Ohio Valley which is more pertinent to the present study.

The other points in Groups III and IV which were recovered from the B_{21} soil zone may have been contemporary with Fea. 8. The one Group III point which was found in the B_{22} soil zone is difficult to account for, but it does seem to indicate antiquity at least as great or greater than Fea. 8.

This conclusion concerning a Brewerton occupation which belongs to the far- flung Lawrentian Tradition seems to be well substantiated by George's (1971: 9-14) review of the Archaic of the Upper Ohio Valley. He summerizes twenty different components in a broad area encompasing the Upper Ohio Drainage which belong to the Lawrentian Tradition. The Friendsville component may be added to this list.

George further concludes that the relationship between the Lawrentian Tradition and the preceeding Early Archaic, which is best represented by the St. Alban's site

(Broyles, 1971), is not yet understood. In respect to this question it is interesting to note that Ritchie (1961: 19) reports that a very small number of Brewerton Side Notched points have faintly serrated edges. One specimen from the Friendsville Site which is described above in Group IV has this attribute. What this means in respect to the Early Archaic projectile points most of which are serrated is yet to be learned.

V. Triangular Points (991, a-j)

There is a sample of ~~ten~~ 10 triangular points. The majority have straight edges, biconvex transverse cross-sections, and bases which are either concave or sometimes straight. The three largest (991, a, e, i) are the most symmetrical and carefully chipped and may be typed as Levanna Points (Ritchie 1961: 31 - 32: Pl. 15). One of these (991e) has very slight grinding or wear on its concave base which is atypical for this type of point. The three smallest (991f, g, k) may be considered as Madison points (Ritchie 1961: 33 - 34; Pl. 16). Considering the small size of these points, their chipping is very coarse and irregular in comparison to the Levanna points. Their transverse cross-sections range from being asymmetrically bitriangular, to biplano, to convexotriangular.

Four others require individual discussion. One badly fire-spalled specimen (991b) has incurvate edges and a slightly ground or worn base. Herbert Kraft (oral communication) has suggested that some triangular points are not points at all. Instead the tip is actually the haft and the base is the edge of a scraper. The second point (991, h) has deliberately rounded basal corners. The third (991c) has the tip broken off. The remaining edges are parallel to each other rather than converging toward a presumed tip. The basal edge of the last specimen is convex but rather irregular. It could be the broken tip of a larger point. One side of this broken edge has been slightly beveled as if it were to be used as a scraper. However no wear is evident.

Half of this sample comes from the center of the site, (Table 1) within the confines of the ~~Monongahela~~ Late Prehistoric village. Three of them (991c, d, e) were in Fea. 19A, Burial 1, although it is not certain if they were actual grave goods or if they were accidentally included in the pit fill. A fourth point was recovered from the plow zone above Fea. 19A and a fifth was in Fea. 18. The other half of this sample was scattered to the north and south of the central village.

Triangular projectile points are characteristic of Late Woodland times throughout the Eastern United States. The half of the Friendsville sample which comes from the Late ~~Woodland~~ Prehistoric village is indicative of this. Those which are scattered to the north and south could have been lost by Late ~~Woodland~~ Prehistoric archers from the village area. It is also possible that they could date from the Archaic. This is particularly true for the badly fire spalled specimen with a ground base. Basal grinding is usually indicative of the Archaic.

TABLE 6

METRIC ATTRIBUTES OF V. Triangular Points

Catalog No.	Length	Width	Thickness	Remarks
13	(20.0 mm)	20.0 mm	4.0 mm	Tip is broken
20	30.0 mm	21.6 mm	5.0 mm	Small section of base is broken
39	(40.0 mm)	23.0 mm	5.0 mm	Tip, part of side, part of base is spalled off
60	19.8 mm	13.0 mm	4.0 mm	
110	23.3 mm	15.0 mm	3.0 mm	
180	20.6 mm	20.6 mm	3.9 mm	
226	(30.0 mm)	21.4 mm	5.0 mm	Tip is broken
229A	(30.0 mm)	23.6 mm	4.6 mm	Tip is broken
229B	27.0 mm	18.0 mm	5.5 mm	
229C	(35.0 mm)	15.6 mm	5.6 mm	Tip is broken

VI. Corner Notched Points (991K-P)

This grouping of ~~six~~ 6 points is reminiscent of several related types dating to the Late Archaic or Transitional stage. The blades are triangular with relatively straight edges. They are also relatively broad and thin when compared to others from the site. Although biconvex, the transverse cross-sections tend to be rather flat. The base ranges from being straight to concave and is not ground except for one specimen (991K). The haft is lateral-basal and is also not ground except on the specimen just mentioned. The shoulder ranges from an obtuse to right angle. Each specimen will be mentioned.

The grinding on the specimen mentioned above occurs only on the extremities of the markedly concave base and in one of the broad shallow notches. This would seem to be an example of the Susquehanna Broad Point (Whitthoft 1953: 4 - 31, and Ritchie 1961: 53 - 54, Pl. 32). Another (991l) smaller and slightly notched on only one side, is probably the pentagonally shaped blank from which the Susquehanna Broad Points are made (Whitthoft 1953: Fig. 1 a, b).

One particularly broad specimen (991m), although broken, is probably an example of the related Perkiomen Broad Point (Whitthoft 1953: 431; Ritchie 1961: 42 - 43, Pl. 23).

Another specimen (991o) is simply a broken stem with a concave base. It is too fragmentary for positive identifications and is hesitatingly included here.

The last two specimens (991n,p) in this group are thought to look something like the range of variation between the Koens-Crispin and Lehigh Broad Points from New Jersey (Kraft 1970: 55 - 59, Pls. 7.1 and .2). One of them (n) is made of argillite as are Koens-Crispin points. However they also look like "Forest notched" points from the Siggins Site (36Fo1) on the Allegheny River in western Pennsylvania (Mayer-Oakes 1955: 52 - 58, Pl.15A; and Fig. 21R). In turn the "Forest notched" points also look something like Susquehanna Broad Points. Although the Siggins Site is multicomponent and the material from it is mixed, Mayer-Oakes, following Carpenter (1942), considers the "Forest notched" points to be Early Woodland and related to Adena. However they could also have been associated with steatite sherds at the Siggins Site. If true, this would suggest a firmer relationship to the Transitional Cultures. This view is supported by McMichael's (1965: 77, 78) conclusion concerning Nicholas County, West Virginia. He considers contracted stemmed, broad blade points to be representative of Susquehanna, Perkiomen and Lehigh Broad Spear Points as well as the Savannah River type.

Although the material is not stratified, he feels that steatite sherds should be associated with these points in Nicholas County.

These points at the Friendsville site came mostly from the center of the site with a few from the north end (Table 1). One scraper (992 m) possibly made on the base of a Lehigh Broad Point, or related form (see Group X), also comes from the center of the site (Table 1). In Group XIII there is a fragment of a broad tool with a thin, biconvex cross-section. The flake scars on it are broad and flat. Unfortunately its outline does not suggest Broad Points. It was from near the north end of the site. The material of this piece might be purple rhyolite which is not native to Garrett County. It was compared to several samples of this material from the Garbaugh Run Quarries (36 AD 1) in Adams County, Pennsylvania, but it does not look exactly like these samples. Nevertheless members of the Maryland Geological Survey indicate that it is a shallow intrusive showing flow structure, which is characteristic of rhyolite. This is of note since most Susquehanna Broad Points from eastern Pennsylvania are made of this material (Witthoft 1953: 9-10) which is local to that area. Whitthoft (1953: 18) has seen occassional examples of Perkiomen Broad Points made of Ohio Flint Ridge chalcedony.

The one steatite sherd (pg. 6, fig. ?) from the south end of the Friendsville site which is discussed elsewhere in the report is also indicative of Transitional Cultures. It could go with these points however, it is some distance from them. More likely it goes with the stemmed points in Group I. None of this data represents a well-defined component. All that can be said in conclusion is that there is considerable to be learned concerning the western limits of the Transitional Cultures.

TABLE 7

METRIC ATTRIBUTES OF VI. Corner Notched Points

Catalog No.	Length	Width	Thickness	Remarks
59	(30.0 mm)	24.7 mm	5.7 mm	Tip is broken
146	(40.0 mm)	(34.0 mm)	(5.0 mm)	Tip, one shoulder and part of one stem spalled off
158	32.7 mm	24.0 mm	5.8 mm	
163	24.6 mm	8.5 mm	4.7 mm	
28	(30.0 mm)	(24.0 mm)	5.0	Tip and part of one shoulder broken off

VII. Round Base Points (991q-y)

This assortment of ~~nine~~ 9 specimens is a grouping of convenience rather than of cultural significance. The blades are usually excurvate. The transverse cross-section is highly variable. The generally rounded, but irregular base is simply a continuation of the excurvate edges. Some of the smaller and thinner of these specimens (991w,y) could be projectile points. The larger, thicker and coarsely chipped specimens may be knives. Except for the absence of side notches, two specimens (991T, The other is not illustrated) in respect to size, outline, cross-section and flaking look very much like the example in Group VIII, thought to be a small Middle Woodland or Snyders Point. Possibly they are preforms or blanks for manufacturing this kind of point.

Most of these are from the center and northern end of the site (Table 1). However this distribution does not seem to be particularly meaningful.

TABLE 8

METRIC ATTRIBUTES OF VII. Round Base Points

Catalog No.	Length	Width	Thickness	Remarks
49	31.5 mm	18.5 mm	5.9 mm	
58A	30.7 mm	15.9 mm	7.0 mm	One face is spalled
58B	42.4 mm	15.0 mm	8.9 mm	
63	45.0 mm	19.4 mm	11.5 mm	Tip and base may be slightly broken
81	33.5 mm	21.9 mm	8.7 mm	
117	32.7 mm	12.6 mm	6.5 mm	
123	31.3 mm	7.7 mm	6.5 mm	
310	36.6 mm	(37.0 mm)	6.6 mm	Part of side and part of base broken
375	40.4 mm	27.5 mm	6.3 mm	

VIII. Miscellaneous Notched Points (992 a-g)

This grouping of ~~eight~~ 8 points is primarily a residual category left-over after defining other groups. As a whole the group has few attributes in common other than the fact they are notched. The blade may be triangular, ovate, excurvate and incurvate. The transverse cross-sections are mostly biconvex. The base may be straight or convex and none are ground. The haft is either lateral-coincidental or lateral-base. A few are slightly ground. The shoulder varies from an obtuse to a right angle and the tang is expanding-concave. (992 a, g)

Two specimens have the thick, flat, unfinished base of the Lamoka point (Ritchie 1961: 29, 30; Pls. 13, 14) and look Lamoka-like in other respects as well. (992 b)

One ovate specimen with an excurvate blade, convex base, and thin, biconvex cross-section looks like a small Snyders Point (Ritchie 1961: 49, Pl. 28). However, it also looks like points from the Feeheley Site in eastern central Michigan (Fitting 1970: 74-76; fig. 27). Fitting considers them to be too widely distributed to be used as a horizon marker.

These comparisons are only suggestive and are not to be considered as positive typological identifications.

The majority of these points are in the center and northern end of the site.

TABLE 9

METRIC ATTRIBUTES OF VIII. Miscellaneous Notched Points

Catalog No.	Length	Width	Thickness	Remarks
12	40.8 mm	19.7 mm	8.7 mm	
58	(48.0 mm)	22.3 mm	11.8 mm	Tip slightly broken off
59	40.0 mm	24.7 mm	6.0 mm	Chip removed from edge of blade
134	45.4 mm	18.8 mm	6.5 mm	
196	(40.0 mm)	19.9 mm	17.0 mm	Tip broken off
226	41.4 mm	(27) ~~24~~ mm	(7) ~~6~~ mm	One shoulder and notch spalled off
322	(22.0 mm)	14.9 mm	5.0 mm	Tip broken off
334	--	--	--	All of blade and one shoulder broken off.

Other Chipped Stone Artifacts

IX. "Drills" (992 j-l)

There are 3 of these artifacts. The first (992, j) is just a slender, broken top with parallel sides. The second (992, k) has a rather thick transverse cross-section, an expanded convex base which is not ground. The tip is slightly metrical. The expanded base or haft is lateral-axial and its edges have been slightly ground. It is made from a lamprophyre volcanic rock according to members of the Maryland Geological Survey. Another example of this distinctively shaped drill has been illustrated from the White Site (Nbn. 2-3), A.D. 905 $\pm$ 250 (M-176) of the Middle Woodland Hunter's Home Phase in central New York (Ritchie 1965: 253-260; pl. 88, 11).

TABLE 10

METRIC ATTRIBUTES OF IX. "Drills"

Catalog No.	Length	Width	Thickness	Remarks
1	28.5 mm	19.0 mm	10.6 mm	Tip is chipped
332	56.2 mm	16.4 mm	6.9 mm	
336	--	9.4 mm	4.7 mm	Base is broken

X. Scrapers (992 h, i, m-p)

There are three scrapers made from the base of projectile points. Two (992 h, i) are made from the base of Brewerton Eared Notched Points as in Group III. Their scraping edges have been carefully retouched. The third (992 m) is made from the base of the Late Archaic or Transitional Broad Points, possibly a Lehigh. There are three end scrapers (992 h, o, p) made from flakes. One (992 p) of these has a symmetrical ovate shape.

TABLE 11

METRIC ATTRIBUTES OF X. Scrapers

Catalog No.	Length	Width	Thickness	Remarks
11	11.0 mm	16.8 mm	5.9 mm	
59	30.0 mm	32.6 mm	6.0 mm	
88	16.6 mm	16.8 mm	5.5 mm	
98	21.0 mm	11.5 mm	4.0 mm	
101	15.5 mm	(15.0 mm)	5.0 mm	
169	33.8 mm	23.8 mm	7.4 mm	

XI. Knife (992g)

This unique specimen has a thick biconvex cross-section, a straight sided, tapered stem with rather irregular edges. The base is convex. The cutting edge is at an oblique angle to the long axis of the specimen. It measures 54 mm long, 26 mm wide, and 11 mm thick. The chipping is rather coarse and irregular.

XII. Strike-a-light (992r)

The only known example of this kind of tool is a bifacially chipped, triangular piece of flint with exceedingly irregular edges. All edges show a considerable amount of battering presumably due to being struck against iron pyrite to make a spark for lighting fires. It is 35 mm long, 33 mm wide and 10 mm thick.

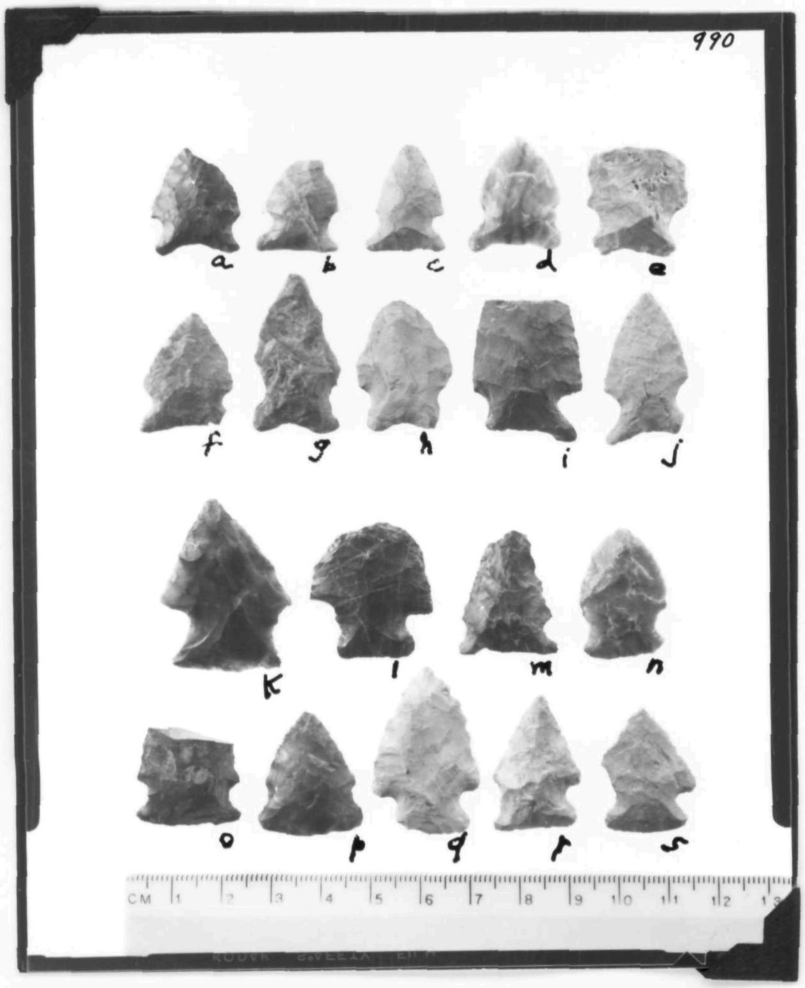
this a purely conjectural functional association, how about some literature citations

XIII. Fragmentary Tools, Retouched Flakes and Cores

There are ten broken tips of projectile points. Two of them are quite large, broad, well chipped, and pertain to types other than those described above. There are four midsections of bifacially flaked tools and one concave base with parallel sides. All edges are ground. It looks very much like the base of a Steubenville, but cannot be positively identified as such. One flake which is not retouched shows polish from use on one edge. There are twenty-two bifacially chipped fragments, some of which may or may not be parts of tools. There are fourteen unifacially chipped flakes. There are four small, exhausted flint cores with multiple striking platforms (#992, s-t)

i = 54
j = 154

Fig. ____. Chipped stone points and point fragments from the Friedsville site. a-p, stemmed ~~group~~; q-t, contracting stemmed ~~group~~. Provinces:

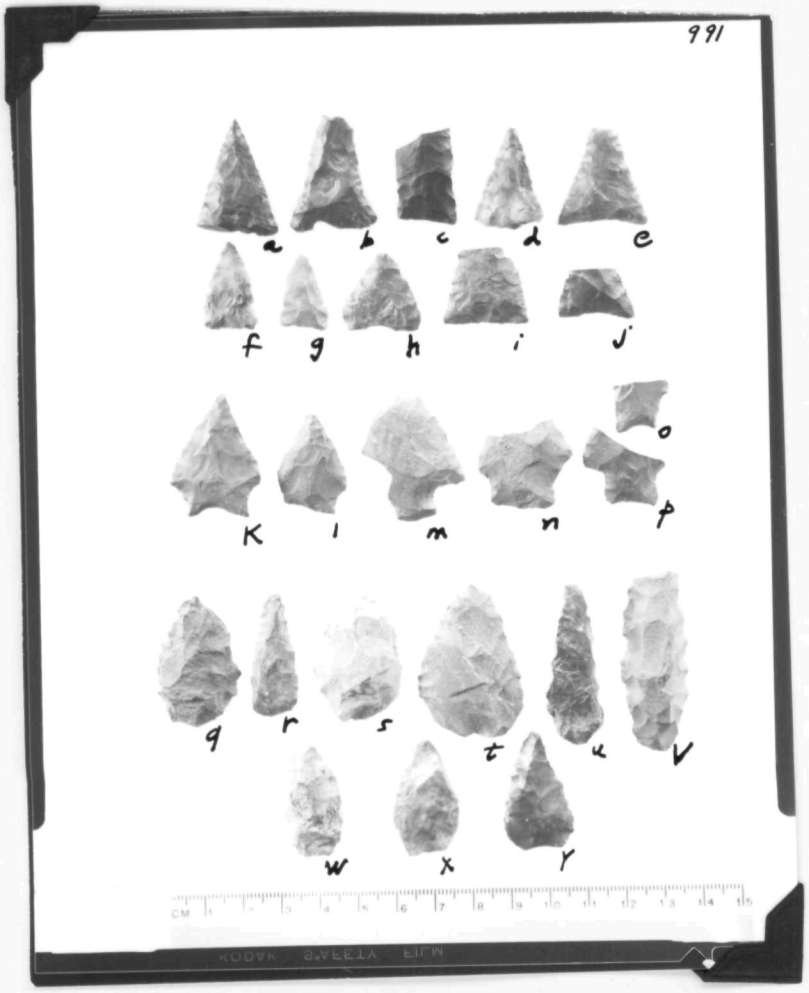


c = 69

r = 124

p = 46A

Fig. ____. Chipped stone points and point fragments from the Friendsville site. a-j, side-notched eared ~~group~~; K-S, side notched ~~group~~. Proveniences:



K-15

Fig. ——. Chipped stone points and point fragments from the Friedsville site. a-j, triangular ~~group~~; K-P, corner notched ~~group~~; q-y, round base ~~group~~.

Provenience:

renumber drills and scrapers h-i.

d - 134

d - 332

Fig. ____ Chipped stone artifacts from the Friendsville site. a-g, miscellaneous notched points; j-l, drills; h-i, m, scrapers made on point bases; n-p, side scrapers made on flakes; q, knife; r, strike-a-light; cores, s-t. Provenience: